

**MICHIGAN SUPERFUND SITE COOPERATIVE AGREEMENT  
QUARTERLY PROGRESS REPORT  
STATE LEAD SITE**

EPA Region 5 Records Ctr.



274095

**Reporting Period:** FY96, Q1

**Site name:** North Bronson Industrial Area (1C)      **CA #:** V005934-01  
**Activity:** RI/FS      **Budget period ends:** 4/30/96

**WORK ACCOMPLISHED** DURING REPORTING PERIOD FOR THIS SITE AND ACTIVITY:  
(PROBLEMS AND DELAYS ENCOUNTERED THIS PERIOD, CORRECTIVE MEASURES TAKEN  
OR PLANNED) **IDENTIFY BY TASK NAME AND NUMBER:**

Task 5: Phase II Remedial Investigation  
Task complete December 1991.

Task 6: Remedial Investigation Report  
Task complete July 1993.

Task 7: Baseline Risk Assessment  
Task complete July 1993.

Task 8: Alternatives Array  
Task complete September 1994.

Task 9: Feasibility Study

The remedial action objectives developed in the FS are being revised to include amendments to MDEQ Act 451 Part 201 in the FS process. The FS revisions may modify the alternatives proposed in the original FS. Revising the FS will delay the development of the Proposed Plan. A letter explaining this delay was mailed to the local community.

Surface Water Quality Division has been asked to assess the potential for using a mixing zone for venting groundwater at the site. The data required for this assessment was prepared and packaged by the site geologist and forwarded to Surface Water.

A information sharing meeting was held for the PRPs by MDEQ on December 6, 1995. The objective of the meeting was to provide the PRPs an opportunity to voice their opinions on relevant issues prior to releasing the Proposed Plan. The issues centered around their comments submitted to the agencies concerning the Bronson RI/FS. These comments were reviewed by the project manager, the site geologist and a division toxicologist in preparation for the meeting. Our response to this document was the focus of our meeting. Notes of the meeting are provided with this report.

**Multi-Site Cooperative Agreement V005934 North Bronson Industrial Area**

The EPA has agreed to include the industrial sewer into the site definition. The sewer may be investigated as a phase of the RI or during the RD. The MDEQ is preparing a Scope of Work for this investigation.

Task 10: Proposed Plan

The North Bronson RI/FS (proposed plan) schedule is being revised to reflect the delay caused by the revisions to the FS.

Task 11: Administrative Record

The MDEQ is reviewing and organizing the administrative record for the site.

Task 12: Draft ROD

None.

Task 13: Final ROD

None.

Task 14: Post ROD/Closeout

None.

**PLANNED PERCENTAGE OF SCHEDULED ACTIVITY** (Task 10) TO BE COMPLETED: 100%

**ACTUAL PERCENTAGE OF ACTIVITY COMPLETED:** 60%

**EXPLANATION OF SIGNIFICANT DIFFERENCE:** Refer to task 10 comments above.

**PLANNED PERCENTAGE OF SCHEDULED ACTIVITY** (TASK 11) TO BE COMPLETED: 40%

**ACTUAL PERCENTAGE OF ACTIVITY COMPLETED:** 40%

**EXPLANATION OF SIGNIFICANT DIFFERENCE:** NA

**FINANCIAL REPORTING FOR EACH ONGOING TASK**

**TASK 10 - PROPOSED PLAN**

	<u>CONTRACTOR</u>	<u>AGENCY</u>
Planned <b>Budget</b>	\$0	\$50,000
Estimated <b>Expenditures*</b> Quarter 1		\$10,000
Estimated <b>Expenditures</b> to Date:		\$24,000

**Multi-Site Cooperative Agreement V005934 North Bronson Industrial Area**

ESTIMATED **BALANCE:** \$26,000

\* Expenditures include analytical costs for the private well survey conducted in .

**Task 11 - ADMINISTRATIVE RECORD**

	<u>CONTRACTOR</u>	<u>AGENCY</u>
Planned <b>Budget</b>	\$0	\$10,000
Estimated <b>Expenditures</b> Quarter 1	\$0	\$ 0
Estimated Expenditures to Date:	\$0	\$ 500
ESTIMATED <b>BALANCE:</b>	\$0	\$ 9,500

**FINANCIAL REPORTING**

	<u>CONTRACTOR</u>	<u>AGENCY</u>
PLANNED RI/FS <b>BUDGET:</b>	\$1,200,000	\$ 240,000
ESTIMATED <b>EXPENDITURES</b> QUARTER 1	\$ 0	\$ 10,000
ESTIMATED <b>EXPENDITURES</b> TO DATE:	\$1,038,000	\$ 204,500
ESTIMATED <b>BALANCE:</b>	\$ 162,000	\$ 35,500

TOTAL **FUNDING** FOR THIS ACTIVITY (RI/FS): \$1,440,000  
TOTAL ESTIMATED **EXPENDITURES** TO DATE : \$1,261,500

**FUNDS AND TIME REMAINING (BALANCE):** \$ 178,500 and 3 months.

ESTIMATED **TIME AND FUNDS NEEDED** TO COMPLETE REQUIRED WORK: 3 months and \$200,000.

EXPLANATION OF ANY SIGNIFICANT DISCREPANCY/JUSTIFICATION FOR INCREASE: NA

Prepared by William H. Carmo Date 2/8/96  
(Project Manager)  
Approved by George Carpenter Date 2/8/96  
(Supervisor)

**Note:** The cost estimates for this reporting period should be viewed as rough estimates as they are based on incomplete expenditure data due to the new accounting system being implemented by the State of Michigan. Subsequent

**Multi-Site Cooperative Agreement V005934 North Bronson Industrial Area**

**reports may need to revise this information as more complete expenditures data becomes available.**

**SUMMARY OF THE  
NORTH BRONSON INDUSTRIAL AREA SUPERFUND SITE  
GENERAL INFORMATION MEETING BETWEEN  
THE MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY (MDEQ), THE U.S.  
ENVIRONMENTAL PROTECTION AGENCY (EPA), AND THE SITE POTENTIALLY  
RESPONSIBLE PARTY (PRP) GROUP**

The North Bronson Industrial Area Superfund site meeting was held on November 9, 1995, in Lansing, Michigan. The meeting requested by the North Bronson PRP Group was sponsored by the Superfund Section of the Environmental Response Division of the MDEQ. This meeting was an informational meeting only and not for negotiations. The summary of this meeting will be placed in the Administrative Record (AR) for the North Bronson Industrial Area site as part of the public record.

Prior to the meeting, the PRP Group submitted a written document entitled, "Comments on the Remedial investigation, Baseline Risk Assessment, and Feasibility Study" which set forth the PRP Group's comments and recommendations concerning the Remedial Investigation/Feasibility Study Report and the Baseline Risk Assessment. At the meeting, MDEQ and EPA representatives presented the agencies' reactions and/or responses to the PRP Groups written submissions and provided additional information concerning this site. Those attending included the following:

<b><u>The PRP Group</u></b>	<b><u>Representing</u></b>
James Kolanek	ITT Automotive
Sally Churchill	Bronson Plating
Stan Welch	Bronson Plating
Larry Mulligan	Bronson Plating
Stephen Q. Giblin	Scott Fetzer
Sandra LeFevre	ITT Automotive
Susan M. Franzetti	L.A. Darling/Marmon
Michael Maierle	Geraghty & Miller
David Tripp	ITT Automotive
Ray Avendt	L.A. Darling/Marmon
Ken Symms	Environmental Standards

<b><u>Agency Delegate</u></b>	<b><u>Representing</u></b>
Bill Harmon	MDEQ Superfund
Bob Delaney	MDEQ Superfund
George Carpenter	MDEQ Superfund
Dan Yordanich	MDEQ Jackson District
Bruce Moore	MDEQ Superfund
Kim Sakowski	MDEQ Superfund
Rosita Clark-Moreno (by telephone)	EPA
<b>Issues and Information Provided</b>	

## **Issues and Information Provided**

1. PRP List. The EPA is preparing the final list of PRPs which will be updated as needed. The MDEQ believes the PRP list and the supporting evidence is discoverable information. When the list is complete, we will provide this information to the PRP Group.

2. Site Boundary. The site boundary or site description consists of the Eastern and Western Lagoons, County Drain (CD) #30, the Industrial Sewer and all media adversely impacted by these potential source areas. The EPA has decided to include the industrial sewer, because the sewer was used to transport wastes to the lagoons and thus is part of the site. The EPA does not believe it is necessary to formally (in writing) revise the site definition because the sewer was identified as part of the site during the remedial investigation. The location of the sewer relative to the water table is unknown.

3. Industrial Sewer Investigation. The North Bronson PRP Group, along with the MDEQ and the EPA, acknowledge that there is a significant source of VOCs in the upper aquifer upgradient from the western lagoons, eastern lagoons, and County Drain #30. However, based on the soil and groundwater data collected during the remedial investigation, the North Bronson PRP Group believes that the upgradient VOC impacts are not a result of releases from the industrial sewer line but rather are a result of releases from other sources. Thus, the North Bronson PRP Group does not agree with the need to conduct an investigation of the industrial sewer line.

Before including the industrial sewer in the Proposed Remedial Action Plan (the "Proposed Plan"), the agencies have agreed to first attempt to verify that a release from the sewer actually occurred. If a release from the sewer can be verified, the scope of the sewer investigation will focus on the impact of the release. Verification of a release could be established by either direct or circumstantial evidence. Sludge leaking from the sewer, breaks in the pipe, or contaminated soil in close proximity to the pipe could all conceivably demonstrate a release from the sewer. The PRP Group noted that it is important to determine the sewer invert as part of the industrial sewer investigation.

A Scope of Work (SOW) will be developed by the agencies for the sewer investigation. The SOW will be provided to the PRP Group. The sewer investigation may be conducted as an Operable Unit or possibly during the remedial design phase. The MDEQ and the PRP Group prefer an Operable Unit approach however, this has not been decided. The investigation may be conducted by the PRP Group or by the MDEQ but this also has not been decided.

4. Operable Units. It was agreed that the agencies would consider, if it was more efficient and effective, to divide the site into Operable Units. The lagoons, CD #30, and groundwater could each be addressed as separate Operable Units or as separate phases of the overall remedy. However, Operable Units are not generally a negotiated issue but we would welcome input from the PRP Group. It was also agreed that combining all of these areas into a single phase of the overall remedy would be difficult. The PRP Group expressed support for dividing the lagoons, CD#30 and the groundwater into separate Operable Units while the EPA recommends an Operable Unit approach for the entire site, but keeping the sewer and the lagoons together.

5. Land Use. The PRP Group proposed that the Baseline Risk Assessment (BRA) needs to be substantially revised. The agencies instead are looking at the generic criteria under Part 201 and at site specific data. Although the MDEQ is not planning on revising the baseline risk assessment to develop site-specific risk-based cleanup criteria, the North Bronson PRP Group may submit to the MDEQ site-specific-risk-based cleanup criteria for review and consideration. A site-specific risk-based cleanup criteria approach may be the most appropriate method for addressing existing contamination at this site. Land use categories allowed by Part 201 and detailed in MDEQ Operational Memo #14 will be used to set cleanup criteria for the site. Land use categories under consideration by exposure area include:

1. Eastern Lagoons: Industrial
2. Western Lagoons: Residential unless access to the area is controlled by PRPs (ie. fencing) then Industrial cleanup criteria could be used.
3. CD #30: Residential
4. Groundwater: Residential Health Based Drinking Water values or Groundwater Surface Water Interface (GSI) values.

6. CD #30. CD #30 is a state protected waterway. It is currently classified as a protected mixing zone. However, recent sediment data indicates a reloading of heavy metals in the drain after the drain was dredged in the late 1980s. The reloading of heavy metals in the sediment may prompt the Surface Water Quality Division (SWQD) of the MDEQ to reclassify the stream and require stricter standards for permitted discharges to the drain. The SWQD contact is Bill Creal.

7. GSI. The CD #30 GSI plus a mixing zone is the point of compliance for the lagoons at the North Bronson Superfund site. Part 201 amendments allow for mixing zones for venting groundwater at sites where an additional load to the receiving stream of site-specific contaminants is allowable. SWQD has been asked to evaluate the possibility of using a mixing zone at CD #30. Final GSI cleanup values will be established after this review. Calculations used by SWQD will be provided to the PRP Group and will also be included in the Administrative Record.

8. Soil/Sludge Criteria. Where appropriate, 20 X GSI values will be used as cleanup criteria for contaminated soil and sludge. The PRP Group may petition the state for alternative cleanup values by providing data that substantiates using alternative cleanup numbers (ie. leachate tests).

9. VOC releases from the Eastern lagoons. Data on the source of VOCs currently associated with the Eastern lagoons are inconclusive. However, downgradient from the eastern lagoons, the VOC contaminated groundwater and groundwater contaminated with metals are mixed or commingled. Unless additional information becomes available or an upgradient source of VOCs can be identified, the assessment of the impact of the Eastern lagoons on CD #30 will have to include both VOCs and heavy metals. It could be argued, based on disposal records or chemical inventories from Bronson Plating, that the source of VOCs in the Eastern lagoons was not Bronson Plating. VOCs may have been transported to the lagoons via the industrial sewer.

10. Proposed Plan Contents and Schedule. The Proposed Plan will only address those portions of the site where sufficient information has been collected to select a remedy. The Proposed Plan schedule will be revised by the agencies. Once the schedule is revised, the PRP Group will receive a copy of the new schedule. Early discussions between the MDEQ and the EPA indicate that the proposed plan may be scheduled for release in late March 1996.

11. Feasibility Study (FS). The FS will be amended to incorporate changes to Part 201. The state project manager provided the Group with a draft revision of the *Remedial Action Goals and a revised listing of the Contaminants of Concern (COC)* for the site. The Remedial Action Goals were revised to include amendments to Part 201. COC were selected based on the 95% UCL on the average concentration or the maximum detected concentrations, whichever was lower. The PRP Group may submit to the state any reasonable alternative that was not reviewed in the FS and may identify areas where more data is needed before a final remedy selection is made. These alternatives could include consolidation of waste in the most eastern Western lagoon or some form of bioremediation. Any reasonable documented alternative will be considered. Open communication between the Group and the State during the Proposed Plan process is encouraged.

The FS amendments are scheduled to be completed in late January 1996.

12. 95% Upper Confidence Levels (UCL). Applicable or Relevant and Appropriate Requirement (ARAR) exceedences (COC) were re-evaluated using the 95% UCL on the mean of log normal transformed data. The data was assumed to be log-normally distributed. The arithmetic mean of the log transformed data was calculated. The 95% UCL on the mean was then calculated for the log transformed data. The 95% UCL or the maximum detected concentration, whichever was lower, was then used in to identify chemicals of concern. COC are defined as chemicals that exceed applicable ARARs.



13. Potential Remedial Alternatives. The agencies are willing to consider the use of a synthetic leachate procedure but may require the PRP to perform of a pilot study. Bioremediation may be considered for another possible alternative. In this instance Mr. John Shauver may be asked for his assistance or input.

14. Exposure Areas. Exposure areas were selected based on the variance of the log-transformed data relative to the number of samples taken in the area. Confidence in the sample base of an exposure area was based on comparing the calculated or statistically valid number of samples required for simple random sampling to the actual number of samples taken in that area. The calculated sample size for each potential exposure area was determined by using the variance within that area to calculate the preferred sample size (Gilbert 1988). Exposure areas were defined as:

1. Western Lagoon Exposure Areas

- a. Berm and sludge
- b. Surface Water
- c. Groundwater

2. Eastern Lagoon Exposure Areas

- a. Surface soils and sludge (0-0.5 ft)
- b. Subsurface soils and sludge (0.5-15 ft)
- c. Groundwater

3. County Drain #30 Exposure Areas

- a. Sediments
- b. Surface Water

15. Threats to the Municipal Water Supply. The lower aquifer supplies drinking water to the city of Bronson. The aquitard separating the contaminated upper aquifer from the lower aquifer is assumed to be incapable of transmitting significant amounts of contaminated water to the lower aquifer. However, there are no monitoring wells in the lower aquifer to provide chemical data to support this assumption. Also, the extent of this aquitard across the site is unknown. There is evidence to indicate that the aquitard is permeable in some locations to transmit water to the lower aquifer. This evidence consists of groundwater levels in the upper aquifer near a municipal well east of the site that indicate flow through the aquitard. Also, E. coli bacteria was detected in this municipal well. The source of this bacteria is suspected to be the public restrooms at a ball diamond north of the well. Furthermore part of the TCE plume beneath Scott Fetzer is or was moving in an easterly direction which is opposite to the perceived direction of groundwater flow in the area. Plume movement may have been influenced by the municipal well when it was in operation. The TCE source beneath the Scott Fetzer building therefore, represents a potential threat to the lower aquifer which supplies the municipal water supply. The PRP Group and the agencies noted that a formal hydrogeologic assessment has not been conducted to evaluate the potential hydraulic connection between the upper aquifer and the lower aquifer and the extent to which, if any, the lower aquifer may have influenced plume movement in the upper

aquifer. As such, any conclusions that have been made to date regarding potential leakage through the aquitard that separates the upper aquifer from the lower aquifer are to be considered speculative in nature.

**MICHIGAN SUPERFUND SITE COOPERATIVE AGREEMENT  
QUARTERLY PROGRESS REPORT  
STATE LEAD SITE**

**Reporting Period: FY96, Q2**

**Site name:** North Bronson Industrial Area (1C)      **CA #:** V005934-01  
**Activity:** RI/FS      **Budget period ends:** 4/30/96

**WORK ACCOMPLISHED DURING REPORTING PERIOD FOR THIS SITE AND ACTIVITY:**  
(PROBLEMS AND DELAYS ENCOUNTERED THIS PERIOD, CORRECTIVE MEASURES TAKEN  
OR PLANNED)      **IDENTIFY BY TASK NAME AND NUMBER:**

Task 5: Phase II Remedial Investigation  
Task complete December 1991.

Task 6: Remedial Investigation Report  
Task complete July 1993.

Task 7: Baseline Risk Assessment  
Task complete July 1993.

Task 8: Alternatives Array  
Task complete September 1994.

Task 9: Feasibility Study

The remedial action objectives developed in the FS are being reviewed or revised to include amendments to MDEQ Act 451 Part 201 in the FS process. Revised RAOs may modify the alternatives proposed in the original FS. Revising the FS has delayed the development of the Proposed Plan.

The MDEQ Toxicologist and Project Manager reviewed and commented on the Review of Conceptual Model for Development of Remedial Action Objectives (RAOs) submitted by the PRPs for our consideration. This document was discussed during a February 8, 1996 phone conference with the PRPs risk assessor, the EPA, and the MDEQ.

The MDEQ site geologist, the Project Manager and a representative of MDEQ Surface Water Quality Division reviewed and commented on the PRP's Supplement to the Feasibility Study for the North Bronson Industrial Area Site Bronson, Michigan. This document was prepared and submitted by Geraghty & Miller, INC on March 14, 1996 for the N. Bronson PRP group. This document was submitted for our consideration during the review of the FS developed under Act 307.

Surface Water Quality Division completed the mixing zone assessment for CD#30. The mixing zone values for the drain are being used to develop chemical specific remedial action goals for the site.

**Multi-Site Cooperative Agreement V005934 North Bronson Industrial Area**

On March 15, 1996 the project manager and a representative from the EPA visited the site to investigate the possibility of using an EPA camera to evaluate the integrity of the industrial sewer. During this investigation, we discovered that the manholes for the system were installed after the pipe was put down. At each manhole, the top half of a two foot section of pipe was removed to provide access to the pipe for maintenance. Therefore, each manhole location along the industrial sewer pipeline represents a point of release from the sewer system.

Also, there is still sludge in the pipes. We could not use the camera because the sludge prevented us from passing the camera through the pipe. Furthermore, because the sludge could potentially be a source of contamination, the MDEQ is planning to sample the material for site contaminants of concern.

Task 10: Proposed Plan

The North Bronson RI/FS (proposed plan) schedule was revised to reflect the delay caused by the revisions to the FS. This schedule was submitted to the EPA for approval.

Task 11: Administrative Record

None.

Task 12: Draft ROD

None.

Task 13: Final ROD

None.

Task 14: Post ROD/Closet

None.

**PLANNED PERCENTAGE OF SCHEDULED ACTIVITY** (Task 10) TO BE COMPLETED: 100%

**ACTUAL PERCENTAGE OF ACTIVITY COMPLETED:** 70%

**EXPLANATION OF SIGNIFICANT DIFFERENCE:** Refer to task 10 comments above.

**PLANNED PERCENTAGE OF SCHEDULED ACTIVITY** (TASK 11) TO BE COMPLETED: 40%

**ACTUAL PERCENTAGE OF ACTIVITY COMPLETED:** 40%

**EXPLANATION OF SIGNIFICANT DIFFERENCE:** NA

Multi-Site Cooperative Agreement V005934 North Bronson Industrial Area

FINANCIAL REPORTING FOR EACH ONGOING TASK

TASK 10 - PROPOSED PLAN	<u>CONTRACTOR</u>	<u>AGENCY</u>
Planned Budget	\$0	\$50,000
Estimated Expenditures* Quarter 2		\$7,700
Estimated Expenditures to Date:		\$31,700
ESTIMATED BALANCE:		\$18,300

\*Note: Expenditures reported under Task 10 include Task 9(FS) review expenditures.

Task 11 - ADMINISTRATIVE RECORD	<u>CONTRACTOR</u>	<u>AGENCY</u>
Planned Budget	\$0	\$10,000
Estimated Expenditures Quarter 2	\$0	\$ 0
Estimated Expenditures to Date:	\$0	\$ 500
ESTIMATED BALANCE:	\$0	\$ 9,500

FINANCIAL REPORTING

	<u>CONTRACTOR</u>	<u>AGENCY</u>
PLANNED RI/FS BUDGET:	\$1,200,000	\$ 240,000
ESTIMATED EXPENDITURES QUARTER 2	\$ 0	\$ 7,700
ESTIMATED EXPENDITURES TO DATE:	\$1,038,000	\$ 212,200
ESTIMATED BALANCE:	\$ 162,000	\$ 27,800

TOTAL FUNDING FOR THIS ACTIVITY (RI/FS): \$1,440,000  
TOTAL ESTIMATED EXPENDITURES TO DATE : \$1,250,000

FUNDS AND TIME REMAINING (BALANCE): \$ 190,000 and 0 months.

ESTIMATED TIME AND FUNDS NEEDED TO COMPLETE REQUIRED WORK: 9 months and \$200,000.

EXPLANATION OF ANY SIGNIFICANT DISCREPANCY/JUSTIFICATION FOR INCREASE: The MDEQ has submitted a request to the EPA to extend the project period of the grant. See Task 9 for justification.

Prepared by William Harmon  
(Project Manager)

Date 5/08/96

Approved by George Argent  
(Supervisor)

Date 5/8/96

**MICHIGAN SUPERFUND SITE COOPERATIVE AGREEMENT  
QUARTERLY PROGRESS REPORT  
STATE LEAD SITE**

**Reporting Period: FY96, Q3**

**Site name:** North Bronson Industrial Area (1C)      **CA #:** V005934-01  
**Activity:** RI/FS      **Budget period ends:** 4/30/96

**WORK ACCOMPLISHED DURING REPORTING PERIOD FOR THIS SITE AND ACTIVITY:**  
(PROBLEMS AND DELAYS ENCOUNTERED THIS PERIOD, CORRECTIVE MEASURES TAKEN  
OR PLANNED)      **IDENTIFY BY TASK NAME AND NUMBER:**

Task 5: Phase II Remedial Investigation  
Task complete December 1991.

Task 6: Remedial Investigation Report  
Task complete July 1993.

Task 7: Baseline Risk Assessment  
Task complete July 1993.

Task 8: Alternatives Array  
Task complete September 1994.

Task 9: Feasibility Study

The remedial action objectives developed in the FS were revised by MDEQ staff to include MDEQ Act 451 Part 201 amendments in the FS process. The MDEQ project manager provided a draft of these revisions to the MDEQ toxicologist and the EPA in June 1996 for review. Comments on the draft revisions will be addressed in the final draft of this document. The MDEQ is also screening an additional alternative which will be included in the amended FS. This alternative consists of constructing a wetland to treat contaminated groundwater at the site. The MDEQ has identified Robert Kadlec, Ph.D. as an expert in constructed wetlands. He will assist MDEQ staff in screening this technology for use at the site.

The MDEQ site geologist and the project manager are developing the Field Sampling Plan (FSP) for investigating the industrial sewer. A draft copy of this plan will be submitted to the EPA for review during the third week of August. The field work for the sewer investigation will take place during the week beginning September 16, 1996. The field work should last three to four days. MDEQ staff will collect soil, sludge and groundwater samples. Groundwater samples will be collected using Geoprobe. Samples will be analyzed on-site by the MDEQ mobile lab, and off-site by EPA CLP labs.

**Multi-Site Cooperative Agreement V005934 North Bronson Industrial Area**

The MDEQ project manager and the site geologist and the Geoprobe operator visited the site June 26, 1996 to scope out potential sampling locations for the sewer investigation.

Expenditures for work under this task will be captured under Task 10

Task 10: Proposed Plan

The North Bronson RI/FS (proposed plan) schedule will be revised to reflect the delay caused by the revisions to the FS and the screening of a constructed wetland as a potential alternative. The revised schedule will be submitted to the EPA for approval.

Task 11: Administrative Record

None.

Task 12: Draft ROD

None.

Task 13: Final ROD

None.

Task 14: Post ROD/Closet

None.

**PLANNED PERCENTAGE OF SCHEDULED ACTIVITY** (Task 10) TO BE COMPLETED: 100%

**ACTUAL PERCENTAGE OF ACTIVITY COMPLETED:** 70%

EXPLANATION OF SIGNIFICANT DIFFERENCE: Refer to task 10 comments above.

**PLANNED PERCENTAGE OF SCHEDULED ACTIVITY** (TASK 11) TO BE COMPLETED: 40%

**ACTUAL PERCENTAGE OF ACTIVITY COMPLETED:** 40%

EXPLANATION OF SIGNIFICANT DIFFERENCE: NA

**FINANCIAL REPORTING FOR EACH ONGOING TASK**

TASK 10 - PROPOSED PLAN	<u>CONTRACTOR</u>	<u>AGENCY</u>
Planned <b>Budget</b>	\$0	\$50,000
Estimated <b>Expenditures</b> prior to this quarter:		\$31,700
Estimated <b>Expenditures*</b> Quarter 3		\$9,000
Estimated <b>Expenditures</b> to Date:		\$40,700
ESTIMATED <b>BALANCE:</b>		\$ 9,300

\*Note: Expenditures reported under Task 10 include Task 9(FS) review expenditures.

**Multi-Site Cooperative Agreement V005934 North Bronson Industrial Area**

**Task 11 - ADMINISTRATIVE RECORD**

	<u>CONTRACTOR</u>	<u>AGENCY</u>
Planned <b>Budget</b>	\$0	\$10,000
Estimated <b>Expenditures</b> prior to this quarter:	\$0	\$ 500
Estimated <b>Expenditures</b> Quarter 3	\$0	\$ 0
Estimated <b>Expenditures</b> to Date:	\$0	\$ 500
<b>ESTIMATED BALANCE:</b>	\$0	\$ 9,500

**FINANCIAL REPORTING**

	<u>CONTRACTOR</u>	<u>AGENCY</u>
PLANNED RI/FS <b>BUDGET:</b>	\$1,200,000	\$ 240,000
ESTIMATED <b>EXPENDITURES</b> PRIOR TO THIS QR:	\$1,038,000	\$ 212,200
ESTIMATED <b>EXPENDITURES</b> QUARTER 3	\$ 0	\$ 9,000
ESTIMATED <b>EXPENDITURES</b> TO DATE:	\$1,038,000	\$ 221,200
<b>ESTIMATED BALANCE:</b>	\$ 162,000	\$ 18,800

TOTAL **FUNDING** FOR THIS ACTIVITY (RI/FS): \$1,440,000

TOTAL ESTIMATED **EXPENDITURES** TO DATE : \$1,259,000

**FUNDS AND TIME REMAINING (BALANCE):** \$ 181,000 and 0 months.

ESTIMATED **TIME AND FUNDS NEEDED** TO COMPLETE REQUIRED WORK: 9 months and \$200,000.

EXPLANATION OF ANY SIGNIFICANT DISCREPANCY/JUSTIFICATION FOR INCREASE: A request to extend the project end period has been forwarded to the EPA. See Task 9 for justification.

Prepared by William H. Armon Date 8/8/96  
(Project Manager)

Approved by George Carpent Date 8/8/96  
(Supervisor)



**MICHIGAN SUPERFUND SITE COOPERATIVE AGREEMENT  
QUARTERLY PROGRESS REPORT  
STATE LEAD SITE**

**Reporting Period:** FY96, Q4

**Site name:** North Bronson Industrial Area (1C)  
**Activity:** RI/FS

**CA #:** V005934-01  
**Budget period ends:** 6/01/97

**WORK ACCOMPLISHED DURING REPORTING PERIOD FOR THIS SITE AND ACTIVITY:  
(PROBLEMS AND DELAYS ENCOUNTERED THIS PERIOD, CORRECTIVE MEASURES  
TAKEN OR PLANNED) IDENTIFY BY TASK NAME AND NUMBER:**

Task 5: Phase II Remedial Investigation  
Task complete December 1991.

Task 6: Remedial Investigation Report  
Task complete July 1993.

Task 7: Baseline Risk Assessment  
Task complete July 1993.

Task 8: Alternatives Array  
Task complete September 1994.

Task 9: Feasibility Study  
The remedial action objectives developed in the FS were revised by MDEQ staff to incorporate Act 451 Part 201 amendments into the FS process. The MDEQ project manager provided a draft of these revisions to the MDEQ toxicologist and the EPA for review. Comments on the draft revisions will be addressed in the final draft of this document. The MDEQ received a draft screening of the wetland alternative from Robert Kadlec Ph.D. This alternative, which will be included in the revised FS, consists of constructing a wetland to treat contaminated groundwater at the site. The MDEQ has sub-contracted Dr. Kadlec through Malcolm Pirnie to assist MDEQ staff in screening and evaluating this technology. Malcolm Pirnie, a state approved LOE, and Dr. Robert Kadlec's services are not to exceed \$5,000.

The MDEQ site geologist and the project manager developed the Field Sampling Plan (FSP) for investigating the industrial sewer. A draft copy of this plan was approved by the EPA in September. MDEQ and EPA staff conducted the sewer investigation September 16, 17, & 18 1996. MDEQ staff collected twenty-two sludge samples from the industrial sewer and fourteen vadose soil and groundwater samples beneath the sewer. Groundwater and sub-surface samples were collected using Geoprobe. Samples were analyzed on-site by the MDEQ mobile lab, and off-site by EPA CLP labs. Results of the investigation will be added to the administrative file in the form of a Technical Memorandum.

**Multi-Site Cooperative Agreement V005934 North Bronson Industrial Area**

Expenditures for work under this task will be captured under Task 10.

**Task 10: Proposed Plan**

The North Bronson RI/FS (proposed plan) schedule was revised to reflect the delay caused by the revisions to the FS and the screening of a constructed wetland as a potential alternative. The revised schedule was submitted to the EPA for approval.

**Task 11: Administrative Record**

None.

**Task 12: Draft ROD**

None.

**Task 13: Final ROD**

None.

**Task 14: Post ROD/Closet**

None.

**PLANNED PERCENTAGE OF SCHEDULED ACTIVITY (Task 10) TO BE COMPLETED: 100%**  
**ACTUAL PERCENTAGE OF ACTIVITY COMPLETED: 75%**

**EXPLANATION OF SIGNIFICANT DIFFERENCE:** Refer to task 10 comments above.

**PLANNED PERCENTAGE OF SCHEDULED ACTIVITY (TASK 11) TO BE COMPLETED: 40%**  
**ACTUAL PERCENTAGE OF ACTIVITY COMPLETED: 40%**

**EXPLANATION OF SIGNIFICANT DIFFERENCE:** NA

**FINANCIAL REPORTING FOR EACH ONGOING TASK**

<b>TASK 10 - PROPOSED PLAN</b>	<b><u>CONTRACTOR</u></b>	<b><u>AGENCY</u></b>
<b>Planned Budget</b>	<b>\$0</b>	<b>\$50,000</b>
<b>Estimated Expenditures prior to this quarter:</b>		<b>\$40,700</b>
<b>Estimated Expenditures* Quarter 4</b>		<b>\$20,000</b>
<b>Estimated Expenditures to Date:</b>		<b>\$60,700</b>
	<b>ESTIMATED BALANCE:</b>	<b>(\$10,700)</b>

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- \* Note: Expenditures reported under Task 10 include FS(Task 9) revisions, the wetland alternative review and the industrial sewer investigation.

<b>Task 11 - ADMINISTRATIVE RECORD</b>	<b><u>CONTRACTOR</u></b>	<b><u>AGENCY</u></b>
<b>Planned Budget</b>	\$0	\$10,000
<b>Estimated Expenditures prior to this quarter:</b>	\$0	\$ 1,000
<b>Estimated Expenditures Quarter 4</b>	\$0	\$ 0
<b>Estimated Expenditures to Date:</b>	\$0	\$ 1,000
<b>ESTIMATED BALANCE:</b>	\$0	\$ 9,000

**FINANCIAL REPORTING**

	<b><u>CONTRACTOR</u></b>	<b><u>AGENCY</u></b>
<b>PLANNED RI/FS BUDGET:</b>	\$1,200,000	\$240,000
<b>ESTIMATED EXPENDITURES PRIOR TO THIS QR:</b>	\$1,038,000	\$221,200
<b>ESTIMATED EXPENDITURES QUARTER 4</b>	\$ 0	\$ 20,000
<b>ESTIMATED EXPENDITURES TO DATE:</b>	\$1,038,000	\$ 241,200
<b>ESTIMATED BALANCE:</b>	\$ 162,000	\$ (1,200)
<b>TOTAL FUNDING FOR THIS ACTIVITY (RI/FS):</b>	\$1,440,000	
<b>TOTAL ESTIMATED EXPENDITURES TO DATE:</b>	\$1,279,000	

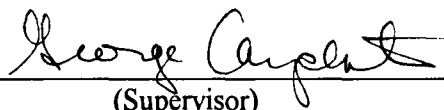
**FUNDS AND TIME REMAINING (BALANCE):** \$161,000 and 9 months.

**ESTIMATED TIME AND FUNDS NEEDED TO COMPLETE REQUIRED WORK:** 9 months and \$161,000. Agency expenditures above the budgeted amounts will be covered by funds remaining in the total budget.

**EXPLANATION OF ANY SIGNIFICANT DISCREPANCY/JUSTIFICATION FOR INCREASE:**  
Project end date has been extended to 97 June 01.

Prepared by   
(Project Manager)

Date 11/08/96

Approved by   
(Supervisor)

Date 11/8/96